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Entrepreneurship and the growth of SMEs in the furniture industry in Tanzania

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2012

document version

Publisher's PDF, also known as Version of record

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citation for published version (APA)

Isaga, N. (2012). *Entrepreneurship and the growth of SMEs in the furniture industry in Tanzania*. [PhD-Thesis – Research external, graduation internal, Vrije Universiteit Amsterdam]. VU University.

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Appendices

Questionnaire

PHD Entrepreneurship Questionnaires

Student: Nsubili Isaga

Dear friend,

With support of the NUFFIC program, I am conducting a research study of small and medium sized enterprises in Tanzania. The objective of this study is to understand the influence of entrepreneurial characteristics on the growth of small and medium enterprises. You have been selected in the survey because of your potential to provide the required information. I am aware that you are very busy, but I would be grateful if you could take the time to answer this questionnaire.

I am also sensitive about maintaining absolute confidentiality about your specific business operations. In this regard, I will treat your answers in the strictest confidence and use the information only for this research.

I would like to thank you in advance for your time and participation in this research study.

Thank you,

Nsubili Isaga

Doctorate candidate

Section 1: INFORMATION ABOUT YOUR BUSINESS (100)

(101) When was your firm established?		(102) How many founders were there?	
1	1-5 years ago	1	1 founder
2	5-10 years ago	2	2 founders
3	10-15 years ago	3	3 founders
4	15-20 years ago	4	4 founders
5	20-25 years ago	5	5 founders
6	Over 25 years ago	6	More than 5 founders

(103) How many of them are still shareholders in the firm?		(104) What is your firm's main activity?	
1	1 founder	1	Manufacturer
2	2 founders	2	Retailer
3	3 founders	3	Wholesaler
4	4 founders		
5	5 founders		
6	More than 5 founders		

(105) How many employees were there when the firm was established (including owner-managers and relatives regularly working for the business)?		(106a) please indicate the firm's total number of owner-managers as stands on January in each of the following years.		
Full time	<input type="text"/>	F. time	P. time	P. workers
Part-time	<input type="text"/>	Jan 2003	<input type="text"/>	<input type="text"/>
		Jan 2004	<input type="text"/>	<input type="text"/>
		Jan 2005	<input type="text"/>	<input type="text"/>
		Jan 2006	<input type="text"/>	<input type="text"/>
		Jan 2007	<input type="text"/>	<input type="text"/>

(106b) Please indicate the firm's total number of relatives regularly working for the business as stands on January in each of the following years.		(106c) Please indicate the firm's total number of normal employees as stands on January in each of the following years.		
	F. time P. time P. workers	F. time	P. time	P. workers
Jan 2003	<input type="text"/>	Jan 2003	<input type="text"/>	<input type="text"/>
Jan 2004	<input type="text"/>	Jan 2004	<input type="text"/>	<input type="text"/>
Jan 2005	<input type="text"/>	Jan 2005	<input type="text"/>	<input type="text"/>
Jan 2006	<input type="text"/>	Jan 2006	<input type="text"/>	<input type="text"/>
Jan 2007	<input type="text"/>	Jan 2007	<input type="text"/>	<input type="text"/>

(107) Which of the following categories best describe your firm legal status (circle one)?		(108) If the firm is not a sole proprietorship, which of the following statements best describes the firm's ownership structure?	
1	Sole Proprietor	1	The firm has one main owner owning more than 50%
2	Partnership	2	The firm has one main owner owning less than 50%
3	Close corporation	3	The firm has a few (2-5) main owners owning

			equal shares
4	Company	4	The firm has a few (2-5) main owners owning unequal shares
5	Other (specify) _____	5	The firm has several (6 or more) owners none of whom owns more than 20% Other (specify) _____

(109) If the firm has several owners, how many owner-managers does the firm have?

(110) Where is your firm located		(111) How would you describe your business sales turnover over the last three years	
1	Dar es Salaam	1	Has increased
2	Arusha	2	Has remained the same
3	Morogoro	3	Has decreased
4	Iringa	4	

(112) If your business sales turnover has increased over the last three years, which of the following percentages best describes the increment (please tick one)		(113) If your business sales turnover has decreased over the last three years which of the following percentages best describes the decrease (please tick one)	
1	0-10%	1	0-10%
2	11-20%	2	11-20%
3	21-30%	3	21-30%
4	31-40%	4	31-40%
5	41-50%	5	41-50%
6	Over 50%	6	Over 50%

(114) How would you describe your business sales turnover over the last five years		(115) If your business sales turnover has increased over the last five years which of the following percentages best describes the decrease (please tick one)	
1	Has increased	1	0-10%
2	Has remained the same	2	11-20%
3	Has decreased	3	21-30%
		4	31-40%
		5	41-50%
		6	Over 50%

(116) If your business sales turnover has decreased over the last three years which of the following percentages best describes the decrease (please tick one)		(117) How would you describe your company's assets development over the five years (please tick one)	
1	0-10%	1	Decline
2	11-20%	2	Remain the same
3	21-30%	3	Increase
4	31-40%		
5	41-50%		
6	Over 50%		

(118) What were the main reasons for the change?

Section 2: OWNER-MANAGER'S DEMOGRAPHIC CHARACTERISTICS (200)

(201) What is your gender?		(202) What is your tribe?
1	Male	
2	Female	

(203) What is your marital status?		(204) What is your age group (please select one)?	
1	Married	1	Below 20
2	Single	2	20 to 30
3	Separated	3	31 to 40
4	Divorced	4	41-50
5	Widowed	5	51 to 60
		6	Over 60

(205) Please indicate the highest level of education you have successfully completed.		(206a) Have you attended any vocational training?	
1	Never attended school	1	Yes
2	Primary school	2	No
3	O level secondary school		
4	A level secondary school		
5	Advance diploma or University degree		
6	Masters degree		
7	Other _____		

(206b) If yes please indicate which category best describes the time you have received the training.		(206C) Please indicate the type of training obtained.	
1	This year	1	Carpentry
2	1 to 5 years ago	2	Trading
3	6 to 10 years ago	3	Civil engineering
4	Over the last ten years	4	Mechanical engineering
		5	Other _____ (please specify)

(206d) Please indicate the duration of the training		(207a) Have you been running any other business operation of your own prior to founding/take over the present firm?	
1	Less than one year	1	Yes
2	One year	2	No
3	Two years	207b	If yes for how long _____
4	Three years		
5	More than three years		

(207C) Did you have any experience of business management tasks through earlier employment prior to going into business for yourself?		(207e) Did you start your business in the same field as your previous employment?	
1	Yes	1	Yes
2	No	2	No
(207d)	If yes for how long _____	207f	If yes how many years of experience did you have in this specific employer? _____

(208a) Was anybody in your family or any close friend of yours running an independent small firm before you?	
1	Yes
2	No

(208b) If yes in respect of relatives kindly indicate what kind of relationship		(208c) Please indicate which type of business he /she was/is running	
1	Parents	1	Shop
2	Uncle	2	Wood and wood works
3	Grandparents	3	Suppliers
4	Brothers	4	Other business
5	Sisters		
6	Aunt		

(208d) To date are they still running the business?	
1	Yes
2	No

(208e) If no why?

(209) Start-up motives

There can be many reasons why you started your current business. Would you indicate how important the following reasons were for you when you were starting the business?

	<i>Not at all important</i>	<i>Unimportant</i>	<i>Neither/No</i>	<i>Important</i>	<i>Very important</i>
(209a) It was the only way I could make a living	1	2	3	4	5
(209b) To be able to do the kind of work I wanted to do	1	2	3	4	5
(209c) Be your own boss	1	2	3	4	5
(209d) To make more money than I would otherwise make	1	2	3	4	5
(209e) To avoid having to work for others	1	2	3	4	5
(209f) To build a successful organisation	1	2	3	4	5
(209g) To achieve a higher position for myself in society	1	2	3	4	5
(209h) To follow the example of a person I admire	1	2	3	4	5
(209i) My salary in previous employment was not enough to sustain my family	1	2	3	4	5
(209j) Due to redundancy	1	2	3	4	5
(209k) Unable to find paid job	1	2	3	4	5
(209l) To have more control of my time	1	2	3	4	5
(209m) To get recognition	1	2	3	4	5

for my accomplishment					
(209n) To be innovative	1	2	3	4	5
(209o) To continue a family tradition	1	2	3	4	5
(209p) I experienced discrimination in my previous work	1	2	3	4	5
(209q) To have something of my own; I could not rely on my spouse's income	1	2	3	4	5
(209r) Using my special talents effectively	1	2	3	4	5

Other, please specify _____

Please indicate the degree to which each of the above factors is still important to you now

	<i>Not at all important</i>	<i>Unimportant</i>	<i>Neither/No</i>	<i>important</i>	<i>Very important</i>
(210a) It is the only way I can make a living	1	2	3	4	5
(210b) To be able to do the kind of work I wanted to do	1	2	3	4	5
(210c) Be your own boss	1	2	3	4	5
(210d) To make more money than I would otherwise make	1	2	3	4	5
(210e) To avoid having to work for others	1	2	3	4	5
(210f) To build a successful organisation	1	2	3	4	5
(210g) To achieve a higher position for myself in society	1	2	3	4	5
(210h) To follow the example of a person I admire	1	2	3	4	5
(210i) Unable to find paid job	1	2	3	4	5
(210j) To have more control of my time	1	2	3	4	5
(210K) To get recognition for my accomplishment	1	2	3	4	5
(210L) To be innovative	1	2	3	4	5
(210M) To continue a family tradition	1	2	3	4	5
(210N) To have something of my own rather than relying on my spouse's income	1	2	3	4	5

(210O) Using my special talent	1	2	3	4	5

Section 3: OWNER-MANAGER'S PERSONALITY TRAITS (300)

(301) Need for achievement

By circling the number that corresponds with your opinion you give to each item on the scale below, show the extent to which you consider each statement listed reflects your opinion/value

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>
(301a) Even though people tell me it can't be done I will persist	1	2	3	4	5
(301b) I look upon my works as simply a way to achieve my goals	1	2	3	4	5
(301c) I will not be satisfied unless I have reached the desired level of results	1	2	3	4	5
(301d) I try to do my job as well as possible even when the tasks assigned to me are difficult	1	2	3	4	5
(301e) I never put important matters off until a more convenient time	1	2	3	4	5
(301f) I spend a considerable amount of time making an organisation I belong to function better	1	2	3	4	5

(302) Locus of control

By circling the number that corresponds with your opinion you give to each item on the scale below, show the extent to which you consider each statement listed reflects your opinion/value

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>
(302a) I am usually able to protect my personal interest	1	2	3	4	5
(302b) My life is determined by my own actions	1	2	3	4	5
(302c) I pretty much determine what will happen in my life	1	2	3	4	5

(302d) When I make plans, I am almost certain to make them work	1	2	3	4	5
(302e) When I get what I want, it is usually because I worked hard for it	1	2	3	4	5
(302f) I feel like that what happens in my life is largely determined by powerful people	1	2	3	4	5
(302g) My life is chiefly controlled by powerful others	1	2	3	4	5
(302h) People like myself have very little chance of protecting our personal interests when they conflict with those of strong pressure groups	1	2	3	4	5
(302i) Getting what I want requires pleasing people above me	1	2	3	4	5
(302j) In order to have my plans work I have to make sure that they fit in with desires of people who have power over me	1	2	3	4	5
(302k) To a great extent my life is controlled by accidental happenings	1	2	3	4	5
(302l) Often there is no chance of protecting my personal interest from unfortunate events	1	2	3	4	5
(302m) I have often found that what is going to happen will happen	1	2	3	4	5
(302n) It's not always wise for me to plan far ahead because many things turn out to be matter of good or bad fortune	1	2	3	4	5

(303) Risk taking propensity

Please circle for each of the statements how well you think it agrees or disagrees with your beliefs

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>
(303a) If I invested money in stocks, it would probably only be in safe stocks from large, well-known companies	1	2	3	4	5
(303b) Taking risks bothers me even if the gains involved are potentially high	1	2	3	4	5
(303c) If the possible rewards were very high, I would not hesitate to put my money into a new business that could fail	1	2	3	4	5
(303d) I consider security as an important element in every aspect of my life	1	2	3	4	5

(304) Innovativeness behaviour

Respond to the following statements by indicating whether you strongly disagree, disagree, neutral, agree or strongly agree. (Please circle the appropriate number)

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>
(304a) People often ask me for help in	1	2	3	4	5

creative activities					
(304b) I seldom bother to think of original ways of doing a task	1	2	3	4	5
(304c) I often try to invent new uses for everyday objects	1	2	3	4	5
(304d) I believe that to become successful in business you must spend some time every day developing new ideas					
(304e) I tend to feel that the old way of living and doing things is the best way	1	2	3	4	5
(304f) I am aware that I am usually one of the last people in my group to accept something new	1	2	3	4	5
(304g) I am generally cautious about accepting new ideas	1	2	3	4	5
(304h) I am suspicious of new inventions and new ways of thinking	1	2	3	4	5

(305) Tolerance for an ambiguity					
Please indicate your opinion regarding the following statements by indicating whether you strongly disagree, disagree, neutral, agree or strongly agree. (Please circle the appropriate number)					
	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>
(305a) A problem has little attraction for me if I don't think it has a solution	1	2	3	4	5
(305b) I am just a little uncomfortable with people unless I feel that I can understand their behaviour	1	2	3	4	5
(305c) There is a right way and a wrong way to do almost everything	1	2	3	4	5
(305d) I would rather bet 1 to 6 on a long shot than 3 to 1 on a probable winner	1	2	3	4	5
(305e) The way to understand complex problems is to be concerned with their larger aspects instead of breaking them into smaller pieces	1	2	3	4	5
(305f) I get pretty anxious when I'm in a social situation over which I have no control	1	2	3	4	5
(305g) Practically, every problem has a solution.	1	2	3	4	5
(305h) It bothers me when I am unable to follow another person's train of thought	1	2	3	4	5
(305i) I have always felt that there is a clear difference between right and wrong	1	2	3	4	5
(305j) It bothers me when I do not know how other people react to me	1	2	3	4	5

(305k) Nothing gets accomplished in this world unless you stick to some basic rules	1	2	3	4	5
(305l) If I were a doctor, I would prefer the uncertainties of a psychiatrist to the clear and definite work of someone like a surgeon or x-ray specialist	1	2	3	4	5
(305m) Vague and impressionistic pictures really have little appeal to me	1	2	3	4	5
(305n) Before an examination, I feel much less anxious if I know how many questions there will be	1	2	3	4	5
(305o) If I were a scientist, I would be bothered by the belief that my work would never be completed (because science will always make new discoveries)	1	2	3	4	5
(305p) The best part of working a jigsaw puzzle is putting in the last piece	1	2	3	4	5
(305q) Sometimes, I rather enjoy going against the rules and doing things I'm not supposed to do	1	2	3	4	5
(305r) I don't like to work on a problem unless there is a possibility of coming out with a clear-cut and unambiguous answer.	1	2	3	4	5
(305s) I like to fool around with new ideas, even if they later on turn out to be a total waste of time	1	2	3	4	5
(305t) Perfect balance is the essence of good composition	1	2	3	4	5

(306) Self-efficacy					
	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>
(306a) When I make plans, I am certain I can make them work.	1	2	3	4	5
(306b) One of my problems is that I cannot get down to work when I have to	1	2	3	4	5
(306c) If I can't do a job the first time I keep on trying until I manage	1	2	3	4	5
(306d) When I set important goals for myself I rarely achieve them	1	2	3	4	5
(306e) I give up on things before completing them	1	2	3	4	5
(306f) I avoid facing difficulties	1	2	3	4	5
(306g) If something looks too complicated I will not even bother to try it	1	2	3	4	5
(306h) When I have something unpleasant to do I stick to it until I finish it	1	2	3	4	5
(306i) When I decide to do something new I go right to work on it	1	2	3	4	5
(306j) When trying to learn something new, I soon give up if I am not initially successful	1	2	3	4	5
(306k) When unexpected problems occur, I don't handle them well	1	2	3	4	5
(306l) I avoid trying to learn new things when they look too difficult for me.	1	2	3	4	5
(306m) Failure just makes me try harder	1	2	3	4	5
(306n) I feel insecure about my ability to do things.	1	2	3	4	5
(306o) I am a self-reliant person	1	2	3	4	5
(306p) I give up easily	1	2	3	4	5
(306q) I do not seem capable of dealing with most problems that come up in life	1	2	3	4	5

Section 4: Owner-manager Cognitive characteristics (400)

401: Entrepreneurial alertness

Which of the following led to the genesis of your business idea?

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>
(401a) It developed from another idea I was considering	1	2	3	4	5
(401b) My experience in a particular problem	1	2	3	4	5
(401c) Thinking about solving a particular problem	1	2	3	4	5
(401d) Knowledge or expertise in furniture	1	2	3	4	5
(401e) My friend and my family	1	2	3	4	5
(401f) Potential or existing customers	1	2	3	4	5
(401g) Existing suppliers or distribution	1	2	3	4	5
(401h) Potential or existing investors/lender	1	2	3	4	5

402: Attitudes towards entrepreneurship

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>
(402a) I am the sort of person who always tries to make organisations I belong to function better	1	2	3	4	5
(402b) I admire people who start their own business	1	2	3	4	5
(402c) When I have plans I am almost certain to make them happen	1	2	3	4	5
(402d) If you try hard enough you can always get what you want in life	1	2	3	4	5
(402e) I consider myself to be an persuasive person	1	2	3	4	5
(402f) I would encourage a friend or relative to start a business	1	2	3	4	5
(402g) I am an imaginative and creative person	1	2	3	4	5
(402h) I usually trust my own judgement even if those around me don't agree with me	1	2	3	4	5
(402i) Except in cases of fraud and malpractice, people who start and fail at business deserve a second chance	1	2	3	4	5
(402j) I am the sort of person who	1	2	3	4	5

handles uncertainty well					
(402k) I am not scared of being in debt	1	2	3	4	5
(402l) I believe in public intervention in economic matters rather than leaving things to the free market	1	2	3	4	5
(402m) I enjoy the challenge of situations that may consider risk	1	2	3	4	5
(402n) I would not feel comfortable speaking to a bank manager about getting a business loan	1	2	3	4	5
(402o) I would rather work for a small business than a large business	1	2	3	4	5
(402p) When working in groups I prefer someone else to take the leading role	1	2	3	4	5
(402q) People who are highly successful in business often tend to have low morals and ethics	1	2	3	4	5
(402r) I have difficulty understanding people who constantly strive towards new goals even after they have achieved a lot of success	1	2	3	4	5

(403) Cognitive style indicator

	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither agree nor disagree</i>	<i>Agree</i>	<i>Strongly Agree</i>
(403a) I want to have a full understanding of all problems	1	2	3	4	5
(403b) I like to analyse problems	1	2	3	4	5
(403c) I make detailed analyses	1	2	3	4	5
(403d) I study each problem until I have understood the underlying logic	1	2	3	4	5
(403e) Developing a clear plan is very important to me	1	2	3	4	5
(403f) I always want to know what should be done when	1	2	3	4	5
(403g) I like detailed action plans	1	2	3	4	5
(403h) I prefer clear structures to do my job.	1	2	3	4	5
(403i) I prefer well prepared meetings with a clear agenda and strict time management	1	2	3	4	5
(403j) I make definite engagements, which I follow up meticulously	1	2	3	4	5
(403k) A good task is a well prepared task	1	2	3	4	5
(403l) I like to contribute to innovative	1	2	3	4	5

solutions					
(403m) I prefer to look for creative solutions	1	2	3	4	5
(403n) I am motivated by ongoing innovation	1	2	3	4	5
(403o) I like variety in my life	1	2	3	4	5
(403p) New ideas attract me more than existing solutions	1	2	3	4	5
(403q) I like to extend the boundaries	1	2	3	4	5
(403r) I try to avoid routine	1	2	3	4	5

Section 5 Additional information (500)

(501) What is the source of working capital? (You can tick more than one)		(502) which of the following stages best describes the firm's current stage of development?	
1	Internally generated funds	1	Start
2	Loan from Government	2	Growth
3	Loan from Banks	3	Maturity
4	Loan from NGOs	4	Decline
5	Loan from family	5	Don't know
6	Loan from friends	6	

(503) If you use a combination of the above sources, which source provides the biggest percentage? _____	504) Apart from this business, what are your other sources of income? _____
---	---

(505) At present do you own and manage any other firm beside this one?	
1	Yes
2	No
505b	If yes how many businesses are you currently managing?

(506) How would you split your time between personal time vs. business time, during a normal working week?					
		0-19%	20-49%	50-69%	70-100%
(506a)	Personal time	1	2	3	4
(506b)	Business time	1	2	3	4

(507) Which of the following statements best describe the firm's goal and objectives?	
1	The firm aims to grow and develop by actively seeking and exploiting new business opportunities, thus the firm can be characterised as growth orientated
2	The firm aims to provide a reasonable livelihood to the entrepreneur, so growth is not a primary goal of the firm

(508) Since your business started, have you introduced any new products which are related to the primary line?		(509) Since your business started, have you entered into the new market?	
1	Yes	1	Yes
2	No	2	No

(510) Since your business started, have you introduced any new products which are not related to the primary line?		(511) Have you received any business support (Workshops, Trainings, Advise, Business Counselling, and Mentoring etc.) since you started your business?	
1	Yes	1	Yes
2	No	2	No

(512a) Please indicate kind of the business support you have received.		(512c) When did you receive that business support?	
1	Entrepreneurship	1	1-5 years ago
2	Business counselling and mentoring	2	6-10 years ago
(512b)	Other specify	3	11-20 years ago
		4	Over 20 years ago

(513) Apart from services provided by external institutions, which of the following organisations does your firm maintain relationships with?	
1	Banks
2	NGOs
3	Public organisations fostering SMES development
4	Business associations
5	Vocational schools
6	Universities and colleges
7	None

(514) Does your firm maintain relationships with other successful firms?		(515) Do you maintain business relationships with friends and relatives?	
1	Yes	1	Yes
2	No	2	No
	If yes how many		If yes how many

(516) Does your firm maintain relationships with suppliers?		(517) Have these relationships been valuable or rather worthless for you and your business?	
1	Yes	1	Yes
2	No	2	No

(518) Please tell us why

(519) Please indicate, in the order of importance, the degree to which each of the following factors have impeded your firm's growth over preceding three years.

	<i>Very important reason</i>	<i>Important reason</i>	<i>Neither/No</i>	<i>Unimportant reason</i>	<i>Not at all important reason</i>
(519a) Inadequate availability of debt financing	1	2	3	4	5
(519b) Inadequate availability of venture capital	1	2	3	4	5
(519c) Inadequate availability of suitable labour	1	2	3	4	5
(519d) Lack of access to raw materials	1	2	3	4	5
(519e) Lack of the market demand	1	2	3	4	5
(519f) Lack of market information	1	2	3	4	5
(519g) Intensity of competition	1	2	3	4	5
(519h) Late payment	1	2	3	4	5
(519i) Lack of support services	1	2	3	4	5
(519j) Management team so small	1	2	3	4	5
(519k) Reluctance to take a new debt	1	2	3	4	5
(519l) Low skilled labour	1	2	3	4	5
(519m) Lack of space	1	2	3	4	5
(519n) No time to grow	1	2	3	4	5
(519o) Lack of training opportunities	1	2	3	4	5

Supplementary materials

Table 0-1: Communalities tolerance of ambiguity

	Initial	Extraction
V305A: A problem has little attraction for me if I don't think it has a solution	1.000	.411
V305B: I am just a little uncomfortable with people unless I feel that I can understand their behaviour	1.000	.719
V305C: There's a right way and a wrong way to do almost everything	1.000	.768
V305D: I would rather bet 1 to 6 on a long shot than 3 to 1 on a probable winner	1.000	.631
V305E: The way to understand complex problems is to be concerned with their larger aspects instead of breaking them into smaller pieces	1.000	.874
V305F: I get pretty anxious when I'm in a social situation over which I have no control	1.000	.766
V305G: Practically every problem has a solution	1.000	.760
V305H: It bothers me when I am unable to follow another person's train of thought	1.000	.565
V305I: I have always felt that there is a clear difference between right and wrong	1.000	.799
V305J: It bothers me when I don't know how other people react to me	1.000	.567
V305K: Nothing gets accomplished in this world unless you stick to some basic rules	1.000	.722
V305L: If I were a doctor, I would prefer the uncertainties of a psychiatrist to the clear and definite work of someone like a surgeon or x-ray specialist	1.000	.418
V305M: Vague and impressionistic pictures really have little appeal to me	1.000	.824
V305N: Before an examination, I feel much less anxious if I know how many questions there will be	1.000	.414
V305O: If I were a scientist, I would be bothered by the belief that my work would never be completed (because science will always make new discoveries)	1.000	.808
V305P: The best part of working a jigsaw puzzle is putting in the last piece	1.000	.803
V305Q: Sometimes, I rather enjoy going against the rules and doing things I'm not supposed to do	1.000	.805
V305R: I don't like to work on a problem unless there is a possibility of coming out with a clear-cut and unambiguous answer	1.000	.616
V305S: I like to fool around with new ideas, even if they later on turn out to be a total waste of time.	1.000	.756
V305T: Perfect balance is the essence of good composition	1.000	.749

Table 0-2: Factor analysis of tolerance of ambiguity

	Component						
	1	2	3	4	5	6	7
V305T: Perfect balance is the essence of good composition	.827	.047	.087	.057	-.073	.182	.115
V305K: Nothing gets accomplished in this world unless you stick to some basic rules	.800	.137	.102	-.003	.132	.177	.061
V305G: Practically every problem has a solution.	.797	-.015	.081	-.075	-.024	.335	-.006
V305R: I don't like to work on a problem unless there is a possibility of coming out with a clear-cut and unambiguous answer.	.755	-.163	-.112	.025	-.068	-.034	-.027
V305F: I get pretty anxious when I'm in a social situation in which I have no control	.074	.864	-.059	-.037	.084	.036	-.009
V305B: I am just a little uncomfortable with people unless I feel that I can understand their behaviour	.059	.809	-.154	-.171	.000	-.072	.056
V305H: It bothers me when I am unable to follow another person's train of thought	-.059	.709	-.027	.232	.001	-.022	-.057
V305J: It bothers me when I don't know how other people react to me.	-.104	.602	-.010	.024	-.166	-.013	.407
V305N: Before an examination, I feel much less anxious if I know how many questions there will be	-.045	.462	-.165	-.009	.068	.083	.400
V305S: I like to fool around with new ideas, even if they later on turn out to be a total waste of time	.129	-.048	.845	.010	.101	-.074	.082
V305Q: Sometimes, I rather enjoy going against the rules and doing things I'm not supposed to do.	.011	-.099	.833	.141	-.256	.070	-.105
V305D: I would rather bet 1 to 6 on a long shot, than 3 to 1 on a probable winner	-.028	-.171	.716	.135	-.207	.034	-.163
V305E: The way to understand complex problems is to be concerned with their larger aspects instead of breaking them into smaller pieces	-.059	-.021	.089	.927	-.015	-.025	.029
V305M: Vague and impressionistic pictures really have little appeal to me	.080	.049	.139	.889	-.073	.000	-.014
V305O: If I were a scientist, I would be bothered by the belief that my work would never be completed (because science will always make new discoveries)	-.018	-.045	-.134	-.013	.883	.035	.088
V305P: The best part of working a jigsaw puzzle is putting in the last piece	-.025	.058	-.115	-.071	.876	.025	.117
V305I: I have always felt that there is a clear difference between right and wrong	.236	.029	.000	.027	-.028	.860	.043
V305C: There's a right way and a wrong way to do almost everything	.271	-.049	.001	-.056	.098	.823	-.045
V305A: A problem has little attraction for me if I don't think it has a solution	-.110	.075	.000	-.076	-.108	-.113	-.350
V305L: I avoid trying to learn new things when they look too difficult for me.	.054	.248	-.103	-.082	.145	-.192	.227
Eigen value	3.441	3.287	2.318	1.638	1.305	1.142	1.004
Percentage of variance explained (Total 70.7)	17.207	16.433	11.588	8.190	6.525	5.708	5.020

Table 0-3: Factor analysis of self-efficacy

	Component			
	1	2	3	4
V306J: When trying to learn something new, I soon give up if I am not initially successful	.832	.164	.210	-.082
V306K: When unexpected problems occur, I don't handle them well	.828	.079	-.072	.172
V306B: One of my problems is that I cannot get down to work when I have to	.800	.151	.177	-.093
V306D: When I set important goals for myself I rarely achieve them	.714	.183	.091	-.158
V306P: I give up easily	.663	.353	.147	.115
V306Q: I do not seem capable of dealing with most problems that come up in life	.660	.109	-.154	.264
V306N: I feel insecure about my ability to do things.	.644	.236	.462	.029
V306F: I avoid facing difficulties	.149	.815	-.104	.053
V306H: When I have something unpleasant to do I stick to it until I finish it.	-.005	.702	.023	.367
V306E: I give up on things before completing them.	.281	.647	.143	-.051
V306L: I avoid trying to learn new things when they look too difficult for me.	.475	.554	.291	.077
V306G: If something looks too complicated I will not even bother to try it.	.417	.554	.212	-.063
V306O: I am a self-reliant person.	.023	-.041	.760	.188
V306C: If I can't do a job the first time I keep on trying until I manage	.014	.208	.626	-.072
V306A: When I make plans, I am certain I can make them work.	.279	-.053	.578	.138
V306M: Failure just makes me try harder.	.230	.230	.489	.475
V306I: When I decide to do something new I go right to work on it	-.103	.072	.207	.765
Eigen value	6.041	1.812	1.534	1.028
Percentage of variance explained (total 61.3)	35.535	10.660	9.026	6.047

Table 0-4: Factor analysis of attitude towards entrepreneurship

	Component					
	1	2	3	4	5	6
V402E: I consider myself to be an persuasive person	.798	-.176	.149	.186	.002	.040
V402D: If you try hard enough you can always get what you want in life	.775	.052	.172	.102	-.077	.062
V402B: I admire people who start their own business	.764	-.062	.063	.063	-.135	-.141
V402F: I would encourage a friend or relative to start a business	.719	-.271	.007	-.112	-.125	.047
V402C: When I have plans I am almost certain to make them happen	.649	-.263	.099	.023	.239	.053
V402G: I am an imaginative and creative person	.543	-.252	.208	.053	.263	.035
V402A: I am the sort of person who always tries to make organisations I belong to function better	.523	-.152	.211	.186	-.098	-.046
V402Q: People who are highly successful in business often tend to have low morals and ethics	-.236	.814	.104	.107	.094	-.157
V402O: I would rather work for a small business than a large business	-.094	.681	-.175	-.328	.130	.170
V402R: I have difficulty understanding people who constantly strive towards new goals even after they have achieved a lot of success	-.425	.549	-.089	-.025	-.207	.247
V402M: I enjoy the challenge of situations that may involve risk	.096	-.024	.814	-.208	-.041	-.002
V402J: I am the sort of person who handles uncertainty well	.176	-.275	.636	.035	-.167	.267
V402H: I usually trust my own judgment even if those around me don't agree with me	.498	.102	.530	.190	.183	.008
V402P: When working in groups I prefer someone else to take the leading role	.028	.053	-.310	.696	-.042	.135
V402K: I am not scared of being in debt	.206	-.260	.172	.558	.160	.230
V402L: I believe in public intervention in economic matters rather than leaving things to the free market	.208	-.041	.464	.544	-.188	-.279
V402N: I would not feel comfortable speaking to a bank manager about getting a business loan	-.120	.052	-.067	-.019	.889	-.012
V402I: Except in cases of fraud and malpractice, people who start and fail at business deserve a second chance	-.008	.045	.089	.134	-.009	.841
Eigen value	5.191	1.520	1.302	1.186	1.146	1.006
Percentage of variance explained (total 63.0)	28.840	8.446	7.231	6.587	6.364	5.589

Table 0-5: Factor analysis of Attitudes towards Entrepreneurship

	Component			
	1	2	3	4
V402E: I consider myself to be an persuasive person	.792	-.198	.173	.168
V402B: I admire people who start their own business	.770	-.081	.054	.013
V402D: If you try hard enough you can always get what you want in life	.767	.037	.205	.113
V402F: I would encourage a friend or relative to start a business	.701	-.281	.018	-.094
V402C: When I have plans I am almost certain to make them happen	.633	-.279	.116	.059
V402A: I am the sort of person who always tries to make organisations I belong to function better	.541	-.178	.178	.063
V402G: I am an imaginative and creative person	.528	-.465	.230	.064
V402Q: People who are highly successful in business often tend to have low morals and ethics	-.186	.806	.053	.015
V402O: I would rather work for a small business than a large business	-.105	.695	-.157	-.190
V402R: I have difficulty understanding people who constantly strive towards new goals even after they have achieved a lot of success	-.444	.571	-.022	.092
V402M: I enjoy the challenge of situations that many involve risk	.092	-.017	.797	-.286
V402J: I am the sort of person who handles uncertainty well	.130	-.259	.737	.093
V402P: When working in groups I prefer someone else to take the leading role	.001	.056	-.148	.839
V402K: I am not scared of being in debt	.193	-.280	.237	.563
Eigen value	4.996	1.437	1.202	1.144
Percentage of variance explained (total 58.5)	33.306	9.577	8.012	7.628
Cronbach's Alpha(overall .421)	.844	.649	.585	.258

Table 0-6: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
V402A	50.8433	22.286	.323	.318	.375
V402B	50.9500	21.606	.346	.228	.362
V402C	51.1867	21.109	.336	.430	.355
V402D	50.9900	21.555	.404	.464	.355
V402E	50.9033	21.854	.484	.646	.357
V402F	50.9133	22.621	.277	.474	.384
V402G	50.9133	22.200	.291	.501	.377
V402J	51.3100	20.817	.337	.353	.351
V402K	52.6300	18.000	.249	.238	.360
V402M	51.1200	21.404	.234	.310	.377
V402O	53.4700	25.494	-.199	.267	.509
V402P	53.0933	22.486	.046	.131	.436
V402Q	53.6033	25.217	-.178	.376	.504
V402R	53.4733	26.424	-.269	.358	.534

Table 0-7: Factor analysis for planning style items

	Component	
	1	2
V404E: Developing a clear plan is very important to me	.225	.789
V404F: I always want to know what should be done when.	.182	.873
V404G: I like detailed action plans	.327	.797
V404H: I prefer clear structures to do my job.	.779	.301
V404I: I prefer well prepared meetings with a clear agenda and strict time management.	.765	.256
V404J: I make definite engagements, which I follow up meticulously	.800	.125
V404K: A good task is a well prepared task	.843	.287

Table 0-8: Factor analysis of start-up motives

	Component				
	1	2	3	4	5
V209M: To get recognition for my accomplishment	.814	.058	.120	.050	-.004
V209N: To be innovative	.784	-.032	.268	-.059	-.070
V209L: To have more control of my time	.764	.012	.102	-.008	-.005
V209F: To build a successful organisation	.649	-.088	.075	.242	-.133
V209C: Be your own boss	.569	-.223	.047	.304	-.037
V209R: Using my special talents effectively	.498	-.037	-.264	.409	.261
V209B: To be able to do the kind of work I wanted to do	.496	-.279	-.253	.456	.127
V209A: It was the only way I could make a living	-.069	.820	-.068	-.022	.036
V209K: Unable to find paid job	-.183	.728	-.023	-.025	.035
V209Q: To have something of my own; I could not rely on my spouse's income	.078	.726	-.060	.141	-.057
V209H: To follow the example of a person I admire	.139	-.077	.874	.105	.047
V209O: To continue a family tradition	.121	-.090	.865	.072	.078
V209G: To achieve a higher position for myself in society	.109	.100	.067	.855	-.053
V209D: To make more money than I would otherwise make	.180	.006	.076	.837	.030
V209E: To avoid having to work for others	.545	-.040	-.063	.571	.094
V209P: I experienced discrimination in my previous work	-.035	-.101	.145	.047	.768
V209I: My salary in the previous employment was not enough to sustain my family	.100	-.035	.030	.020	.727
V209J: Due to redundancy	-.170	.468	-.104	-.168	.521

Table 0-9: Factor analysis of current motives

	Component				
	1	2	3	4	5
V210L: To have more control of my time	.779	.061	.007	.379	.063
V210M: To get recognition for my accomplishment	.745	.061	.028	.342	.064
V210R: Using my special talent	.701	-.103	.201	-.044	-.076
V210N: To be innovative	.641	.141	.465	-.073	.222
V210E: To avoid having to work for others	.637	-.122	.151	-.028	-.028
V210G: To achieve a higher position for myself in society	.080	.867	.103	.081	.092
V210A: It is the only way I can make a living	-.183	.754	.081	-.022	-.090
V210Q: To have something of my own rather than relying on my spouse's income	.145	.721	-.029	.090	.011
V210K: Unable to find paid job	.020	.067	-.799	-.193	.083
V210F: To build a successful organisation	.377	.158	.705	.090	.109
V210C: Be your own boss	.241	.222	.529	.439	.051
V210B: To be able to do the kind of work I wanted to do	.121	.048	.119	.780	.087
V210D: To make more money than I would otherwise make	.132	.047	.164	.752	.038
V210O: To continue a family tradition	-.054	.028	.011	.028	.894
V210H: To follow the example of a person I admire	.142	-.027	.025	.110	.839

Table 0-10: Correlation matrix among demographic characteristics

	1	2	3	4	5	6	7	8
1 Owner-manager's age	1							
2 Owner-manager's formal education	.027	1						
3 Vocational training education	.000	.119*	1					
4 Workshop attended	.108	.299**	.189**	1				
5 Entrepreneurial experience	-.050	.069	.047	.084	1			
6 Management experience	-.009	.203**	.239**	.536**	.330**	1		
7 Industrial experience	-.033	.190**	.253**	.561**	.187**	.833**	1	
8 Family background	-.195**	.127*	.004	.169**	.255**	.248**	.174**	1

Table 0-11: Correlation matrix among personality traits

1		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
2	Need for achievement factor	1														
3	Internal locus of control	.580**	1													
4	External locus of control	-.415**	-.302**	1												
5	Higher level of risk taking	.261**	.196**	.053	1											
6	Lower level of risk taking	-.219**	-.169**	-.263**	-.060	1										
7	Innovativeness	.665**	.739**	-.711**	.485**	-.333**	1									
8	Tolerance for ambiguity	-.209**	-.160**	-.219**	-.057	.039	-.158**	1								
9	Tolerance for ambiguity	.075	.013	.329**	-.014	-.108	.234**	-.029	1							
10	Tolerance for ambiguity	-.272**	-.243**	-.349**	-.074	.318**	-.341**	.107	-.195**	1						
11	Tolerance for ambiguity	-.211**	-.160**	-.082	-.179**	.012	-.163**	-.126*	-.046	-.039	1					
12	Tolerance for ambiguity	.057	.065	.212**	-.128*	-.220**	.127*	-.073	.090	-.364**	.045	1				
13	Tolerance for ambiguity	-.147*	-.158**	-.026	-.115*	.040	-.053	.324**	.196**	-.070	-.034	-.026	1			
14	Self-efficacy persistence	.423**	.456**	-.482**	.055	-.285**	.788**	-.224**	.219**	-.409**	.028	.172**	-.115*	1		
15	Self-efficacy effort	.601**	.567**	.403**	.231**	-.187**	.741**	-.149**	.146*	-.121*	-.157**	.043	-.072	.449**	1	
16	Self-efficacy initiative	.594**	.475**	.351**	.148*	-.142*	.479**	-.351**	.155**	-.148*	-.237**	-.033	-.316**	.361**	.573**	1

Table 0-12: Multiple regression results on personality traits and SMEs growth (5 year period)

SMEs growth measures	Characteristics	B	Significance	Tolerance	VIF	R ²
Sales	(Constant)	-1.020	.063			.440
	Need for achievement	.260	.020	.366	2.731	
	Internal locus of control	.086	.335	.432	2.316	
	External locus of control	.161	.000	.535	1.870	
	Positive attitude towards risk taking	.008	.853	.847	1.180	
	Negative attitude towards risk taking	.049	.169	.820	1.220	
	Innovativeness	.406	.023	.135	7.427	
	Self-efficacy persistence	-.022	.682	.449	2.228	
	Self-efficacy effort	-.044	.624	.439	2.277	
	Self-efficacy initiative	.031	.699	.441	2.267	
Assets	(Constant)	.280	.568			.366
	Need for achievement	.301	.003	.366	2.731	
	Internal locus of control	.215	.008	.432	2.316	
	External locus of control	.067	.080	.535	1.870	
	Positive attitude towards risk taking	-.037	.344	.847	1.180	
	Negative attitude towards risk taking	-.055	.086	.820	1.220	
	Innovativeness	.076	.353	.135	7.427	
	Self-efficacy persistence	.034	.474	.449	2.228	
	Self-efficacy effort	.102	.208	.439	2.277	
	Self-efficacy initiative	-.084	.239	.441	2.267	

Table 0-13: Multiple regression results on personality traits and SMEs growth (3 year period)

SMEs growth measure	Characteristics	B	Significance	Tolerance	VIF	R ²
Sales	(Constant)	-1.856	.002			.494
	Need for achievement	.393	.002	.366	2.731	
	Internal locus of control	.134	.175	.432	2.316	
	External locus of control	.253	.000	.535	1.870	
	Positive attitude towards risk taking	-.029	.553	.847	1.180	
	Negative attitude towards risk taking	.012	.763	.820	1.220	
	Innovativeness	.386	.000	.135	7.427	
	Self-efficacy persistence	-.053	.367	.449	2.228	
	Self-efficacy effort	-.045	.651	.439	2.277	
	Self-efficacy initiative	.048	.584	.441	2.267	

Table 0-14: Correlation matrix among cognitive characteristics

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Low alertness	1																
2	High alertness	-.491**	1															
3	Positive attitude towards risk taking	-.097	.228**	1														
4	Positive attitude towards venture creation and growth	-.330**	.792**	.336**	1													
5	Knowing style	.222**	-.374**	-.336**	-.644**	1												
6	Planning style	.248**	-.389**	-.317**	-.760**	.631**	1											
7	Creating style	-.370**	.516**	.340**	.726**	-.512**	-.538**	1										
8	Strive for personal wealth (start-up motives)	-.208**	.164**	.137*	.412**	-.393**	-.328**	.253**	1									
9	Need for survival (start-up motives)	.096	-.069	-.040	-.189**	.195**	.191**	-.170**	-.198**	1								
10	Role models (start-up motives)	-.264**	.165**	.055	.836**	-.231**	-.188**	.238**	.219**	-.138*	1							
11	Need for independence (start-up motives)	-.078	.132*	.012	.115*	-.198**	-.081	.059	.307**	.040	.157**	1						
12	Job dissatisfaction (start-up motives)	-.072	-.012	-.109	-.060	.018	.070	-.106	.052	-.052	.109	.025	1					
13	Need for independency and recognition (current motives)	-.209**	.233**	.174**	.394**	-.417**	-.362**	.286**	.663**	-.125*	.178**	.188**	-.011	1				
14	Need for survival and status (current motive)	-.098	.078	-.085	.023	-.113*	-.070	.044	.131*	.116*	.106	.425**	-.029	.109	1			
15	Role models (current motive)	-.239**	.087	-.123*	.730**	-.082	-.165**	.119*	.158**	-.056	.659**	.090	.141*	.165**	.027	1		
16	Personal wealth satisfaction (current motive)	-.161**	.176**	.166**	.306**	-.212**	-.201**	.209**	.504**	-.147*	.144*	.199**	-.050	.382**	.138*	.150**	1	
17	Desire to build a successful business (current motive)	-.215**	.231**	.182**	.753**	-.432**	-.417**	.347**	.436**	-.328**	.162**	.109	-.102	.375**	.116*	.041	.319**	1

Table 0-15: Multiple regression results on cognitive characteristics and SMEs growth (5 year period)

SMEs growth measures	Characteristics	B	Significance	Tolerance	VIF	R ²
Sales	(Constant)	-2.103	.001			.723
	Low alertness	-.014	.504	.681	1.469	
	High alertness	.099	.000	.559	1.790	
	Positive attitude towards risk taking	-.062	.052	.757	1.321	
	Knowing style	-.069	.191	.442	2.264	
	Positive attitude towards venture creation and growth	.104	.220	.141	7.072	
	Creating style	.895	.000	.528	1.893	
	Need for independence (start-up motives)	-.021	.630	.411	2.431	
	Survival (start-up motives)	-.004	.821	.832	1.202	
	Role models (start-up motives)	.071	.001	.493	2.028	
	Independence and recognition (current motives)	.042	.345	.512	1.954	
	Role models(current motive	-.038	.083	.478	2.094	
	Desire to build a successful business (current motive)	.015	.575	.620	1.613	
Assets	(Constant)	.601	.373			.530
	Low alertness	-.062	.007	.681	1.469	
	High alertness	.128	.000	.559	1.790	
	Positive attitude towards risk taking	.077	.027	.757	1.321	
	Knowing style	-.146	.013	.442	2.264	
	Planning style	-.055	.557	.351	2.846	
	Positive attitude towards venture creation and growth	-.027	.771	.141	7.072	
	Creating style	.248	.000	.528	1.893	
	Need for independence (start-up motives)	.123	.013	.411	2.431	
	Role models (start-up motives)	-.073	.004	.724	1.380	
	Independence and recognition (current motives)	-.046	.352	.512	1.954	
	Desire to build a successful business (current motive)					

Table 0-16: Multiple regression results on cognitive characteristics and SMEs growth (3 year period)

SMEs growth measure	Characteristics	B	Significance	Tolerance	VIF	R ²
Sales	(Constant)	-.228	.802			.548
	Low alertness	-.035	.255	.681	1.469	
	High alertness	.078	.058	.559	1.790	
	Positive attitude towards risk taking	.045	.342	.757	1.321	
	Knowing style	-.122	.121	.442	2.264	
	Planning style	-.347	.007	.351	2.846	
	Positive attitude towards venture creation and growth	.046	.718	.141	7.072	
	Creating style	.563	.000	.528	1.893	
	Need for independence (start-up motives)	-.033	.619	.411	2.431	
	Survival (start-up motives)	-.058	.045	.832	1.202	
	Role models (start-up motives)	.058	.063	.493	2.028	
	Independence and recognition (current motives)	.012	.853	.512	1.954	
	Role models(current motive)	.007	.831	.478	2.094	
	Desire to build a successful business (current motive)	.085	.069	.685	1.460	

Table 0-17: Family background and informal networks cross tabulation

		Does your firm maintain relationships with suppliers?		Total
		No	Yes	
Family background	No	83	28	111
	Yes	74	115	189
Total		157	143	300

Table 0-18: Family background and informal networks cross tabulation

		Do you maintain business relationships with friends and relative		Total
		No	Yes	
Family background	No	72	39	111
	Yes	33	156	189
Total		105	195	300